HV

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,368	03/06/2002	Yefim Massarsky	16816-00015	1611

7590 01/12/2005

MIRICK O'CONNELL
MIRICK O'CONNELL, DEMALLIE & LOUGEE, LLP
1700 WEST PARK DRIVE
WESTBOROUGH, MA 01581-3941

EXAMINER	
HUYNH, THU V	
ART UNIT	**PAPER NUMBER**
2178	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/092,368	MASSARSKY, YEFIM	
	Examiner	Art Unit	
	Thu V Huynh	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: application filed on 03/06/2002, which is a continuation of application 09/258,922 (US patent 6,385,628) filed on 03/01/1999, which is a continue in-part of application 08/961,780 filed on 10/31/1997 (US patent 6,021,417).

2. Claims 1-30 are pending in the case. Claims 1, 14, 27 are independent claims.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-4, 7-15, 17-18, 20-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-4, 17, 20 and 21 of U.S. Patent No. 6,021,417. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Regarding independent claim 1 in the instant invention, applicant claims a method of simulating the creation of a mock artist's work from an electronically stored image and creating

from the electronically stored image a display image on a monitor, in which the display image comprises at least one texture, the method comprising the steps of:

- storing at least one display texture corresponding to a mock artist style;
- selecting portions of the electronically stored image according to a sequence; and
- displaying, in the sequence on the monitor, a representations of each selected portion of the electronically stored image based upon the at least one texture in each selected portion of the electronically stored image.

Regarding independent claim 17 in the invention of US Patent 6,021,417, the '417 patent teaches a method of simulating the creation of a mock artist's drawing or painting image on a computer monitor which is integrated into a vending machine, from an electronically stored image comprising:

- electronically storing a plurality of display textures for use in creating the mock image; and
- generating and displaying on the monitor an icon which simulates drawing or painting the mock image and using instructions to move said icon about the monitor, wherein the mock image is created gradually as said icon moves, to simulate the process by which an artist may create the mock image, including displaying on said monitor said substitute display textures in the areas of the display corresponding to said substituted portions of the electronically-stored image, and in which displaying on said monitor said substituted display textures includes gradually creating on said monitor said substituted display textures, and in which gradually creating said substituted display

textures includes moving said icon across said monitor in a predetermined movement pattern, in which said predetermined movement pattern is accomplished in one area of the display corresponding to said substituted portions of the electronically-stored image at a time, and further in which gradually creating on said monitor said substituted display textures includes creating said display textures along the path on which said icon traverses on the monitor.

'417 teaches "diving said electronically-stored image into a plurality of separate image areas", "substituting said stored display textures for portions of the electronically-stored image" in which an icon is used to draw or paint "one area of the display corresponding to said substituted portions of the electronically-stored image at a time", and "the mock image is created gradually as said icon moves, to simulate the process by which an artist may create the mock image".

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have recognized that portions of the electronically-stored image must be selected in a sequence in order to replace with textures so that the electronically-stored image is created gradually on the monitor as it was being drawn or painted by an artist as claimed.

Regarding dependent claim 2 in the instant invention, the '417 further teaches the step of creating a hard copy of the image displayed on the monitor after the display image has been fully created by the display of all of the portions of the electronically stored image (**the '417, claim 21** teaches the system further "including a hard copy output device, and means for

providing said electronic mock artist's image to said output device, to create a hard copy of the said mock artist's image").

Regarding dependent claim 3 in the instant invention, the '417 further teaches wherein the selecting step includes the step of identifying groups of pixels in the electronically stored image which have similar display parameter values as portions (**the '417, claim 17** teaches "determining the grey scale value of pixels of the electronically stored image, dividing the determined grey scale values into groups, dividing said electronically stored image into a plurality of separate image areas, each said image area corresponding generally to contiguous image areas of approximate the same display parameter value").

Regarding dependent claim 4 in the instant invention, the '417 further teaches wherein the display parameter values are grey scale or color values (**the '417, claim 17** teaches "determining the grey scale value of pixels of the electronically stored image, dividing the determined grey scale values into groups, dividing said electronically stored image into a plurality of separate image areas, each said image area corresponding generally to contiguous image areas of approximate the same display parameter value"

Regarding dependent claim 7 in the instant invention, the '417 further teaches wherein the displaying step further includes the step of gradually displaying the representation for a portion (**the '417, claim 17** teaches "displaying on the monitor an icon which simulates drawing or painting the mock image and using instructions to move said icon about the monitor,

wherein the mock image is created gradually as said icon moves" and "moving said icon across said monitor in a predetermined movement pattern, in which said predetermined movement pattern is accomplished in one area of the display corresponding to said substituted portions of the electronically-stored image at a time").

Regarding dependent claim 8 in the instant invention, the '417 further teaches wherein the displaying step further includes the steps of moving an icon across the monitor at areas corresponding to the selected portions and displaying the representation of each selected portion along the path traversed by the icon (**the '417, claim 17** teaches "displaying on the monitor an icon which simulates drawing or painting the mock image and using instructions to move said icon about the monitor, wherein the mock image is created gradually as said icon moves" and "moving said icon across said monitor in a predetermined movement pattern, in which said predetermined movement pattern is accomplished in one area of the display corresponding to said substituted portions of the electronically-stored image at a time and further in which gradually creating on said monitor said substituted display textures includes creating said display textures along the path on which said icon traverses on the monitor").

Regarding dependent claim 9 in the instant invention, the '417 further teaches wherein the icon is moved according to a predetermined pattern (**the '417, claim 17** teaches "moving said icon across said monitor in a predetermined movement pattern, in which said predetermined movement pattern").

Regarding dependent claim 10 in the instant invention, the '417 further teaches wherein the representation of each selected portion is first displayed while the icon is at the display area corresponding to the portion (**the '417, claim 17** teaches "moving said icon across said monitor in a predetermined movement pattern, in which said predetermined movement pattern is accomplished in one area of the display corresponding to said substituted portions of the electronically-stored image at a time, and further in which gradually creating on said monitor said substituted display textures includes creating said display textures along the path on which said icon traverses on the monitor").

Regarding dependent claim 11 in the instant invention, the '417 further teaches wherein the step of storing at least one texture includes the step of storing a plurality of textures corresponding to a plurality of mock artist's styles (**the '417, claim 17** teaches storing plurality of display textures for use in creating the mock image, wherein said mock artist has a predetermined style and wherein said stored display textures correspond to said predetermined style of said mock artist"; and claim 20 teaches "means for selecting a mock artist having a predetermined artistic style: means for storing a plurality of drawing textures corresponding to said selected mock artist's predetermined artistic style").

Regarding dependent claim 12 in the instant invention, the '417 further teaches selecting a mock artist's style from the plurality of mock artist's styles, and wherein the at least one texture corresponding to the selected mock artist's style is then used in the displaying step (**the '417, claim 20** teaches "means for selecting a mock artist having a predetermined artistic

style: means for storing a plurality of drawing textures corresponding to said selected mock artist's predetermined artistic style; means for substituting one or more of said stored textures for different areas of said stored image to create an electronic mock artist's drawing or painting image corresponding to said selected artist's predetermined artistic style").

Regarding independent claims 13, 15 in the instant invention, the '417 further teaches capturing an electronic image from an input device and storing captured electronic image as the electronically stored image (**the '417, claim 17** teaches creating of mock artist's drawing or painting image on computer monitor including "translating the electronically-stored image into computer instructions capable of creating said mock image". It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have recognized that in order to store an image as an electronically-stored image, the system must have a capture device to capture an electronic image before storing it).

Regarding independent claim 14, claim 14 is for a computer system performing the method of claim 1, and is rejected under the same rationale. The '417 teaches a computer system monitor perform method of claim 1, which stores electronic image and textures for different artist styles as explained above. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have recognized that the computer system must have a memory storing an electronic image; a monitor for displaying simulating the creation of painting image; and a memory storing at least one display texture corresponding to a mock artist style.

Claims 17-18 and 20-26 are for a computer system performing the method of claims 1-3 and 7-12, respectively and are rejected under the same rationale.

5. Claim 27 is rejected under the judicially created doctrine of double patenting over claim 19 of U. S. Patent No. 6,021,417 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Regarding independent claim 27 in the instant invention, applicant claims the method of a photography booth for creating a printed output of a mock artist's drawing or painting image comprising:

- a means for accepting monetary to enable creation of the printed output;
- a printer;
- a computer with memory;
- means for storing an image in the computer memory;
- means for selecting a mock artist having a predetermined artistic style;
- means for storing at least one display texture corresponding to the selected mock artist's predetermined artistic style;
- means for substituting one or more of the stored textures for different areas of the stored image to create an electronic mock artist's drawing or painting image corresponding to the selected artist's predetermined artistic style; and

- means for printing the mock artist's image.

Regarding independent claim 19 in the invention of US Patent 6,021,417, the '417 patent teaches a photography booth for creating printed output of a mock artist's drawing or painting image, comprising:

- a means for accepting monetary to enable creation of the printed output;
- a printer;
- a computer with memory;
- means for storing a customer-provided image in said computer memory;
- means for selecting a mock artist having a predetermined artistic style;
- means for storing a plurality of drawing texture corresponding to the selected mock artist's predetermined artistic style;
- means for substituting one or more of the stored textures for different areas of the stored image to create an electronic mock artist's drawing or painting image corresponding to the selected artist's predetermined artistic style; and
- means for providing said electronic mock artist's image to said printer to print said mock artist's image.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

7. **Claims 1-26 are provisionally rejected under the judicially created doctrine of double patenting over claims 23-35 of copending Application No. 09/447,962. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.**

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: simulating the creation of a mock artist's work from an electronically stored images and creating from the electronically stored image a sequentially display image on a monitor.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 1-7, 13, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blank, US 5,469,536, issued 1995 in view of Itoh et al., US 5,630,038, filed 1995.**

Regarding independent claim 1, Blank teaches the steps of:

- storing at least one display texture corresponding to a mock artist style (Blank, col.42, lines 51-65 and col.46, lines 11-21, using textures to paint portions of an image);
- selecting a plurality of portions of the electronically stored image according to a sequence (Blank, col.37, lines 16-20; col.42, lines 51-65 and col.46, lines 11-21; user is able to sequentially select plurality of portions of the image to apply texture on the portions of the image); and
- sequentially displaying on the monitor representations of each selected portion of the electronically stored image using at least one stored display texture in each selected portion, to create the display image gradually over time as a series of sequentially-displayed portions (Blank, col.42, lines 51-65 and col.46, lines 11-21 col.51, lines 6-25; sequentially displaying on the monitor the applied texture, such as painting the portion of the image using special effects, such as brush stroke).

Blank teaches special effects including gradually blending images and using airbrush to spray paint effect (Blank, col.28, lines 28-35; col.44, lines 10-48).

Itoh teaches gradually displaying the paint effect on a portion of an image using a stylus pen (Itoh, col.1, lines 40-43; col.3, lines 25-30; col.4, lines 60-67 and col.5, lines 36-55).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Itoh and Blank to enhance gradually painting in special effects when manipulate the image. It is noted that gradually paint a portion of an image on a screen was also well known in the art at the time the invention was made to provide an attractively smooth or gradually transition (see Busch, US 3,944,731, issued 1976, background,

col.1, lines 10-25; Nishimura, US 5,303,041, filed 1992, background, col.2, line 55 – col.3, line 5 and Kitaura et al., US 5,425,111, col.2, line 64 – col.3, line 6).

Regarding dependent claim 2, which is dependent on claim 1. Blank explicitly discloses the step of creating a hard copy of the image displayed on the monitor after the display image has been fully created by the display of all of the portions of the electronically stored image (Blank, col.14, lines 19-21 and fig.2, printer 118).

Regarding dependent claim 3, which is dependent on claim 1. Blank explicitly discloses wherein the selecting step includes the step of identifying groups of pixels in the electronically stored image which have similar display parameter values as a single portion (Blank, col.42, lines 51-65; col.46, lines 11-21 and col.51, lines 6-25; identifying groups of pixels in the electronically stored image which are yellow to apply red color).

Regarding dependent claim 4, which is dependent on claim 3. Refer to the rationale relied to reject claim 25, "display parameter values is color values" is addressed. The rationale is incorporated herein.

Regarding dependent claim 5, which is dependent on claim 1. Blank explicitly discloses wherein the selecting step includes the step of determining a display sequence for the portions of the electronically stored image such that a least on of selected portion in the sequence is not contiguous with an immediately preceding selected portion in the sequence (Blank, col.42,

lines 51-65; col.46, lines 11-21; and col.51, lines 6-25; the user is able to select the yellow leave as first portions to change the color of the first portions and blue clouds as the second portions which are separate with the first portion to change colors of the second portions).

Regarding dependent claim 6, which is dependent on claim 1. Blank explicitly disclose the steps of identifying groups of pixels in the electronically stored image which have similar parameter values as single portions and determining a sequence for the portions of the electronically stored image such that separate portions having similar display parameter values are grouped in the sequence (Blank, col.42, lines 51-65; col.46, lines 11-21 and col.51, lines 6-25; identifying groups of pixels in the electronically stored image which are yellow to apply red color).

Regarding dependent claim 7, which is dependent on claim 1. Refer to the rationale relied to reject claim 1, the limitation of "gradually displaying the representation for a portion" is included. The rationale is incorporated herein.

Regarding dependent claim 13, which is dependent on claim 1. Blank explicitly teaches capturing an electronic image from an input device; and storing the captured electronic image as the electronically stored image (Blank, abstract, col.10, lines 40-53 and col.10, line 63 – col.11, line 11).

Regarding dependent claim 16, which is dependent on claim 15. Blank explicitly disclose the image capture device is a video camera (Blank, abstract, col.10, lines 40-53 and col.10, line 63 – col.11, line 11).

8. Claims 8, 10, 21, 23, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blank in view of Itoh as applied to claim 7 above, and further in view of Kiss, US 5,687,304, issued priority filed 1994.

Regarding dependent claim 8, which is dependent on claim 7. Blank teaches wherein the displaying step further includes the step of displaying an icon on the monitor, and moving the icon on the monitor at areas to select portions (Blank, col.31, lines 10-11, lines 23-24, and 28-35).

Kiss teaches displaying an icon on the monitor, and moving the icon across the monitor at areas corresponding to the selected portions; displaying the representation of each selected portion along the path traversed by the icon (Kiss, col.1, lines 32-43; col.4, lines 26-31; and col.8, lines 5-14).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kiss into Blank and Itoh to provide a brush stroke on the screen during painting, since it would have provided realistic painting or drawing as Kiss disclosed in col.8, lines 10-13. It is noted that display a moving icon across the areas for painting these areas was well known in the art at the time the invention was made (see Kermisch, US 4,751,503, filed 1984, col.4, lines 50-60).

Regarding dependent claim 10, which is dependent on claim 8. Blank teaches wherein the displaying step further includes the step of displaying an icon on the monitor, and moving the icon on the monitor at areas to select portions (Blank, col.31, lines 10-11, lines 23-24, and 28-35).

Kiss teaches displaying an icon on the monitor, and moving the icon across the monitor at areas corresponding to the selected portions (Kiss, col.1, lines 32-43; col.4, lines 26-31; and col.8, lines 5-14).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kiss into Blank to provide a brush stroke on the screen during painting, since it would have provide a realistic painting or drawing as Kiss disclose in col.8, lines 10-13. It is noted that display a moving icon across the areas for painting these areas was well known in the art at the time the invention was made (see Kermisch, US 4,751,503, filed 1984, col.4, lines 50-60).

Claims 21 and 23 are for a computer system performing the method of claims 8 and 10 respectively and are rejected under the same rationale.

Regarding dependent claim 28, which is dependent on claim 7. Blank teaches after at least some of the selected portion are displayed, deleting at least some of one or more portions and then recreating the deleted portions (Blank, col.7, lines1-11; col.49, lines 40-45).

9. Claims 9, 22, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Blank in view of Itoh and further in view of Kiss as applied to claims 8 and 28 above, and further in view of Mizutani, US 5,844,565, priority filed 1994.

Regarding dependent claim 9, which is dependent on claim 8. Blank does not explicitly teach wherein the icon is moved according to a predetermined pattern.

Mizutani teaches simulating brush strokes in a variety of directions, including perpendicular to enhance the simulation of painting techniques (Mizutani, col.2, lines 9-30 and col.7, lines 15-25).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Mizutani and Blank and Itoh to provide directions of the brush stroke to paint portions of the image, since this would have enhanced the simulation of painting the image as Mizutani disclosed.

Regarding dependent claim 29, which is dependent on claim 28. Mizutani teaches simulation brush strokes in including perpendicular to enhance the simulation of painting as well as erasing techniques (Mizutani, col.2, lines 9-30; col.5, lines 61-65 and col.7, lines 15-25;).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Mizutani and Blank and Itoh to provide directions of the brush stroke to paint or erase portions of the image, since this would have enhanced the simulation of painting the image as Mizutani disclosed.

Regarding dependent claim 30, which is dependent on claim 29. Blank does not explicitly teaches wherein the icon appearance during erasing is different than it appearance during recreating.

However, different tools are used to paint or erase portions of an image is well known in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention to include different icons to paint or erase the image or portions of the image, since this combination would have indicated the user to what function the user is using to edit/manipulate the image.

Claim 22 is for a computer system performing the method of claim 9 and is rejected under the same rationale.

10. Claims 11-12, 14 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blank in view of Itoh as applied to claim 1 above, and further in view of Mizutani, US 5,844,565, priority filed 1994.

Regarding dependent claim 11, which is dependent on claim 1. Blank teaches colors and marble style of textures on paint effects (Blank, col.46, lines 10-21).

Mizutani teaches simulating painting brush stroke using many of texture corresponding to a plurality of mock artist's styles (Mizutani, col.1, lines 44-46, col.2, lines 31-35, col.4, lines 20-37; "oil painting" and "watercolor").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Mizutani and Blank and Itoh to provided plurality of

textures as mock artist's style to paint the image, since this would have provided the different styles to paint the image on screen.

Regarding dependent claim 12, which is dependent on claim 11. Blank does not explicitly disclose selecting a mock artist's style from the plurality of mock artist's styles, and wherein the at least one texture corresponding to the selected mock artist's style is then used in the displaying step.

Mizutani teaches simulating painting brush stroke using many of textures corresponding to a plurality of mock artist's styles (Mizutani, col.1, lines 44-46, col.2, lines 31-35, col.4, lines 20-37; "oil painting" and "watercolor").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Mizutani and Blank and Itoh to provided plurality of textures to paint the image, since this would have displayed the image in different styles.

Claims 24-25 are for a computer system performing the method of claims 11-12 respectively and are rejected under the same rationale.

Regarding independent claim 14, claim 14 is for a computer system performing the method of claim 1, and is rejected under the same rationale. Blank further discloses:

- a memory storing an electronic image (Blank, abstract and fig.2, computer processor must has a memory for storing an image in order to display on the image on the screen to the user);

- a monitor (Blank, fig.2, item 110); and
- a memory storing at least one display texture corresponding to a texture style (Blank, abstract and col.46, lines 11-21, computer processor must has a memory for storing at least one color texture to paint the image).

Blank teaches colors and marble style of textures on paint effects (Blank, col.46, lines 10-21).

Mizutani teaches simulating painting brush stroke using many of texture corresponding to a plurality of mock artist's styles (Mizutani, col.1, lines 44-46, col.2, lines 31-35, col.4, lines 20-37; "oil painting" and "watercolor").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Mizutani and Blank and Itoh to provided plurality of textures as mock artist's style to paint the image, since this would have provided the different styles to paint the image on screen.

11. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen, US 5,647,796 filed 11/1995.

Regarding independent claim 1, Cohen teaches the steps of:

- storing at least one display texture (Cohen, col.1, lines 55-60; painting a picture inherently the step of storing at least one display texture);
- selecting a plurality of portions of the electronically stored image according to a sequence (Cohen, col.5, lines 3-15 and figures 7A-7C); and

- sequentially displaying on the monitor representations of each selected portion of the electronically stored image using at least one stored display texture in each selected portion, to create the display image gradually over time as a series of sequentially-displayed portions (Cohen, col.5, lines 3-25 and figures 7A-7C).

While teaching sequentially painting a picture on a screen, Cohen further teaches sequentially painting objects on a screen "so as to suddenly appear or gradually materialize in place" (Cohen, col.5, lines 46-50) and "numerous different effects and simulations may be created by varying the predetermined group of objects used ... and display of each object within the group" (Cohen, col.5, lines 51-59). These suggest that each portion in Cohen's picture is able to suddenly or gradually display.

It would have been obvious to a person of ordinary skill the art at the time the invention was made to have included gradually painting portions of the image to provide attractively smooth transition as Cohen suggested. It is noted that gradually paint a portion of an image on a screen was also well known in the art at the time the invention was made to provide an attractively smooth or gradually transition (see Busch, US 3,944,731, issued 1976, background, col.1, lines 10-25; Nishimura, US 5,303,041, filed 1992, background, col.2, line 55 – col.3, line 5 and Kitaura et al., US 5,425,111, col.2, line 64 – col.3, line 6).

Regarding independent claim 14, claim 14 is for a computer system performing the method of claim 23, and is rejected under the same rationale. Cohen further discloses:

- a memory storing an electronic image (Cohen, col.3, lines 10-43, computer processor must has a memory for storing an image in order to display on the image on the screen to the user);
- a monitor (Cohen, col.3, lines 33-43); and
- a memory storing at least one display texture corresponding to a mock artist style (Cohen, col.3, lines 10-43, computer processor must has a memory for storing at least one color texture to paint the image).

12. Claims 2, 13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen as applied to claim 1 above, and further in view of Yamato et al., US 5,680,534, filed 1994.

Regarding dependent claim 2, which is dependent on claim 1. Cohen does not explicitly disclose the step of creating a hard copy of the image displayed on the monitor after the display image has been fully created by the display of all of the portions of the electronically stored image.

Yamato teaches a simulation game allow a user to paint an image including a printer and printer interface for printing the created image (Yamato, col.5, lines 30-37; col.6, lines 55-64 and col.20, lines 24-26).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Yamato and Cohen to include a printer in the Cohen system to print the created image, since this would allow the user to have a copy of the image he/she was created.

Regarding dependent claim 13, which is dependent on claim 1. Cohen does not explicitly teaches capturing an electronic image from an input device; and storing the captured electronic image as the electronically stored image.

Yamato teaches capturing an electronic image from an input device and storing the captured electronic image as the electronically stored image (Yamato, col.6, lines 57-64).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Yamato and Cohen to provide means for capturing and storing an image, since it would have provide images for the user to colors and modify the image in a game system as Yamato disclosed.

Claims 17 and 15 are for a computer system performing the method of claims 2 and 13, respectively and are rejected under the same rationale.

13. Claims 3-4, 6, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen as applied to claim 23 above, and further in view of Venable, US 5,461,493, issued 1995.

Regarding dependent claim 3, which is dependent on claim 1. Cohen does not explicitly disclose wherein the selecting step includes the step of identifying groups of pixels in the electronically stored image which have similar display parameter values as portions.

Venable teaches identifying groups of pixels in an image which have similar display parameter value as portions to change color (Venable, col.3, lines 11-19; col.4, lines 36-49 and

col.8, lines 2-21; a color scale of values for saturation attribute is used to identify portions have the same color scale).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Venable and Cohen to identify groups of portions of the image, since this would have enhanced painting the portions of the image which have the same value pixel as Venable suggested.

Regarding dependent claim 4, which is dependent on claim 3. Refer to the rationale relied to reject claim 3, "display parameter values is color values" is addressed. The rationale is incorporated herein.

Regarding dependent claim 6, which is dependent on claim 1. Refer to the rationale relied to reject to claim 3, the limitation of "identifying groups of pixels in the electronically stored image which have similar parameter values as single portions and determining a sequence for the portions of the electronically stored image such that separate portions having similar display parameter values are grouped in the sequence" is included. The rationale is incorporated herein.

Claim 18-9 are for a computer system performing the method of claims 3 and 6 respectively and are rejected under the same rationale.

14. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Cohen as applied to claim 1 above, and further in view of Simon, US 6,619,860 B1, filed 11/1997.

Regarding dependent claim 5, which is dependent on claim 1. Cohen does not explicitly disclose wherein the selecting step includes the step of determining a display sequence for the portions of the electronically stored image such that the display of the representation of at least a first selected portion in the sequence is not contiguous with the representation of another selected portion that is displayed immediately before the representation of the first selected portion, so that the display does not fill sequentially in contiguous areas.

Simon teaches wherein the selecting step includes the step of determining a display sequence for the portions of the electronically stored image such that the display of the representation of at least a first selected portion in the sequence is not contiguous with the representation of another selected portion that is displayed immediately before the representation of the first selected portion, so that the display does not fill sequentially in contiguous areas (Simon, fig.4, frames 80, 82 and 84, the display does not fill sequentially in contiguous areas since the hair portion is not contiguous with the body portion).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Simon and Cohen to simulating the sequential production of the processed image, since this would have be interested to the user.

15. Claims 8, 10, 21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen as applied to claim 23 above, and further in view of Kiss, US 5,687,304, issued priority filed 1994.

Regarding dependent claim 8, which is dependent on claim 7. Cohen does not explicitly disclose wherein the displaying step further includes the step of displaying an icon on the monitor, and moving the icon across the monitor at areas corresponding to the selected portions.

Kiss teaches displaying an icon on the monitor, and moving the icon across the monitor at areas corresponding to the selected portions; displaying the representation of each selected portion along the path traversed by the icon (Kiss, col.1, lines 32-43; col.4, lines 26-31; and col.8, lines 5-14).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kiss into Cohen to provide a brush stroke on the screen during painting, since it would have provided realistic painting or drawing as Kiss disclose in col.8, lines 10-13. It is noted that display a moving icon across the areas for painting these areas was well known in the art at the time the invention was made (see Kermisch, US 4,751,503, filed 1984, col.4, lines 50-60).

Regarding dependent claim 10, which is dependent on claim 8. Cohen does not explicitly disclose wherein the representation of each selected portion is first displayed while the icon is at the display area corresponding to such portion.

Kiss teaches displaying an icon on the monitor, and moving the icon across the monitor at areas corresponding to the selected portions (Kiss, col.1, lines 32-43; col.4, lines 26-31; and col.8, lines 5-14).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kiss into Cohen to provide a brush stroke on the screen during painting, since it would have provide a realistic painting or drawing as Kiss disclose in col.8, lines 10-13. It is noted that display a moving icon across the areas for painting these areas was well known in the art at the time the invention was made (see Kermisch, US 4,751,503, filed 1984, col.4, lines 50-60).

Claim 21 and 23 are for a computer system performing the method of claims 8 and 10 respectively and are rejected under the same rationale.

16. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen further in view of Kiss as applied to claim 29 above, and further in view of Mizutani, US 5,844,565, priority filed 1994.

Regarding dependent claim 9, which is dependent on claim 8. Cohen does not explicitly teach wherein the icon is moved according to a predetermined pattern.

Mizutani teaches simulating brush strokes in a variety of directions, including perpendicular to enhance the simulation of painting techniques (Mizutani, col.2, lines 9-30 and col.7, lines 15-25).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Mizutani and Cohen to provide directions of the brush stroke to paint portions of the image, since this would have enhanced the simulation of painting the image as Mizutani disclosed.

Claim 22 is for a computer system performing the method of claim 31 and is rejected under the same rationale.

17. **Claims 11-12, 16, 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen as applied to claim 23 above, and further in view of Mizutani, US 5,844,565, priority filed 1994.**

Regarding dependent claim 11, which is dependent on claim 1. Cohen does not explicitly disclose wherein the step of storing at least one texture includes the step of storing a plurality of textures corresponding to a plurality of mock artist's styles.

Mizutani teaches simulating painting brush stroke using many of texture corresponding to a plurality of mock artist's styles (Mizutani, col.1, lines 44-46, col.2, lines 31-35, col.4, lines 20-37; "oil painting" and "watercolor").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Mizutani and Cohen to provided plurality of textures to paint the image, since this would have provided the different styles to paint the image on screen.

Regarding dependent claim 12, which is dependent on claim 11. Cohen does not explicitly disclose selecting a mock artist's style from the plurality of mock artist's styles, and wherein the at least one texture corresponding to the selected mock artist's style is then used in the displaying step.

Mizutani teaches simulating painting brush stroke using many of textures corresponding to a plurality of mock artist's styles (Mizutani, col.1, lines 44-46, col.2, lines 31-35; col.4, lines 20-37; "oil painting" and "watercolor").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Mizutani and Cohen to provided plurality of texture to paint the image, since this would have displayed the image in different styles.

Regarding dependent claim 43, which is dependent on claim 42. Cohen teaches the limitations of claim 42 as explained above. Cohen does not explicitly disclose the image capture device is a video camera.

Mizutani teaches image capture device is a video camera (Mizutani, col.3, lines 46-50).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combine Mizutani into Cohen and Yamato to offer means to capture images, since scanner or video camera is used to capture images.

Claims 24-25 are for a computer system performing the method of claims 11-12, respectively and are rejected under the same rationale.

18. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen as applied to claim 1 above and further in view of Blank, US 5,469,536, issued 1995.

Regarding dependent claim 5, which is dependent on claim 1. Cohen does not explicitly disclose wherein the selecting step includes the step of determining a display sequence for the portions of the electronically stored image such that the display of the representation of at

least a first selected portion in the sequence is not contiguous with the representation of another selected portion that is displayed immediately before the representation of the first selected portion, so that the display does not fill sequentially in contiguous areas.

Blank teaches display of the representation of at least a first selected portion in the sequence is not contiguous with the representation of another selected portion that is displayed immediately before the representation of the first selected portion, so that the display does not fill sequentially in contiguous areas (Blank, col.37, lines 16-36 and col.51, lines 6-25, brushing separate portions which does not have contiguous pixel value);

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Blank and Cohen to simulating the sequential production of the processed image, since this would have be interested to the user.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Busch, US 3944731, patented 1976, teaches video special effects generator.

Kermisch, US 4751503, patented 1998, teaches image processing method with improve digital airbrush touch up.

Nishimura, US 5303041, patented 1994, teaches special effects generator with key signal motion detection.

Kitaura et al., US 5425111, patented 1995, teaches image processing apparatus.

Boezemen et al., US 6184895, filed 01/1997, teaches method and system for using color information to create special effects.

Yamada, US 5283841, patented 1994, teaches image processing method and apparatus.

Noyama et al., US 5594850, filed 1994, teaches image simulation method.

Ohara et al., US 5739814, filed 1992, teaches information storage system and book device for providing information in response to the user specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu V Huynh whose telephone number is 703-305-9774. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R Herndon can be reached on 703-308-5186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVH
January 3, 2005

STEPHEN HONG
SUPERVISORY PATENT EXAMINER